

3482
U-49332
(U-067)

Hoab District
San Rafael Resource Area
P. O. Drawer AB
Price, Utah 84501

Allen P. Childs
Mine Engineer
Arch of Utah/Trail Mountain Mine
P. O. Box 550
Orangeville, Utah 84537

JUL 22 1987

Dear Mr. Childs:

Trail Mountain's 1987 coal exploration plan is approved. Access and sites for TM-DH-1, TM-DH-2 and TM-DH-3 are subject to the stipulations contained in the attached Forest Service Environmental Assessment. Also, drilling procedures must follow the attached "Exploration Drilling Stipulations." Both these documents, as well as an approved copy of the exploration plan, are enclosed.

Please update your plan by sending three copies of the map showing final location of the three drill holes. Also be aware of the Forest Service stipulations regarding a pre-work meeting and a road use permit. Should you have any questions, please contact Stephen Falk of my staff or me.

Sincerely yours,

/s/ LARRY H. HERR

Area Manager

Enclosures (3)
1-Forest Service EA
2-Drilling Stipulations
3-Approved Plan

cc: MDO, U-065 w/enclosures
SD, U-921 w/o enclosures
DOGM, Salt Lake City, w/o enclosures
Manti-LaSal National Forest, w/o enclosures

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Wang 0551D

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NOV 23 1987

DIVISION OF
OIL, GAS & MINING

COAL/TAR SAND EXPLORATION DRILLING STIPULATIONS

1. The BLM Area Manager shall be notified 48 hours prior to start and completion of the program.
2. The lessee/licensee is responsible to see that all personnel contracted or otherwise doing work on the exploration program are aware of these approval requirements and abide by all regulations and stipulations governing this program. Any changes to the approved exploration plan must receive approval from the Area Manager prior to implementation.
3. When artesian flows or water horizons with possible development potential are encountered, the BLM Area Manager shall be notified immediately so that a determination may be made concerning their development potential. When possible, water samples shall be collected by the operator for analysis by the BLM. A written report is required upon completion of exploration as noted by Stipulation 9 H.
4. Upon completion of down-hole procedures, all drill holes shall be properly sealed from the bottom to the collar. Any variance from the procedures itemized below must be approved by the Area Manager.
 - A. Drill holes in coal deposits amenable to underground mining must be cemented from the bottom of the hole to at least 50 feet above the highest minable coal bed (4 feet thick or more) or aquifer.
 - B. The remainder of the hole to within 5 feet of the surface may be filled with a gel rather than cement which meets or exceeds the following standards:
 - 1) Ten-minute gel strength of 20 pounds/100 square feet.
 - 2) Filtrate volume should measure 13.5 cc on an API standard filter test.
 - 3) The marsh funnel viscosity should be a minimum of 50 seconds.
 - C. The 5-foot void at the surface will be plugged with cement except as required in stipulation #7.
5. Drill holes in tar sand deposits may be plugged with cement or plugging gels. Gels must meet the specifications identified in 4 B above. The 5-foot surface plug would still apply. Cementing aquifers would also be applicable as above.
6. If adverse downhole conditions prevent a completed drill hole from being properly plugged after attempting all standard industry plugging procedures, the Area Manager will be contacted immediately to make a determination as to a final plugging method.

7. The hole location is to be marked by placing an approved marker made of galvanized steel, brass, aluminum or similar non-corrosive metal in the concrete plug. Such markers are to show hole number, year drilled, lessee/licensee name, and as feasible, the section, township, and range in which the hole is located. Top of concrete plug, if located in cultivated field, must be set below normal plow depth (10 to 12 inches). In noncultivated areas, all marker caps should not protrude above the ground level.

8. The Area Manager shall be notified as to the time when the first hole is to be plugged so that a representative of the BLM may arrange to observe the plugging procedure. Subsequent observations of other holes being plugged will be arranged as appropriate.

9. Upon completion of exploration activities, a report as required by 43 CFR 3485.1 (formerly 30 CFR 211.62) shall be submitted to the Moab District Office. The report at a minimum must contain the following:

A. Location(s) and serial number(s) of lands under Federal lease or license on which exploration was conducted.

B. A description of the completed exploration operations that includes the number of holes drilled, total depth of each hole, and completion date of each hole.

C. A map showing the locations of all holes drilled, other excavations, and the coal or tar sand outcrop lines as appropriate. The scale of the map shall not be less than 1 inch equals 1 mile.

D. Analysis of coal or tar sand samples and other pertinent tests obtained from exploration operations.

E. Copies of all in-hole mechanical or geophysical stratigraphic surveys or logs, such as electric logs, gamma ray-neutron logs, sonic logs, or any other logs. The records shall include a lithologic log of all strata penetrated and conditions encountered such as water, gas or any unusual conditions.

F. Status of reclamation of the disturbed areas.

G. Any other information requested by the District Manager.

H. Hydrologic reports using the attached form.

10. An individual lease or license bond in an amount to be determined by the Area Manager shall have been filed with the proper office before commencement of exploration activities. The bond shall be used as required to cover costs incurred by the BLM to correct any violation of this program.

REPORT OF WATER OBSERVED

Company: _____ Lease/License Number: _____
Address: _____ Drill Hole Number: _____
_____ Date Completed: _____
_____ Total Depth: _____

Company Contact: _____

Phone Number: _____

Drilling Contractor: _____

Address: _____

Company Contact: _____

Phone Number: _____

Location of Hole: T. ___ S., R. ___ E., SLB&M, Section. ____: ___ $\frac{1}{4}$ ___ $\frac{1}{4}$ ___ $\frac{1}{4}$

Collar Elevation of Hole: _____ Hole Diameter: _____

Drilling Method/Medium: _____

Static Water Level: _____

Acquifer #1

Depth below Collar Elevation: _____ Formation: _____

Rock Type: _____ Yield(GPM): _____

Date Reported to BLM:^{*} _____ Requirements of BLM:^{*} _____

_____ Water Sample Provided to BLM? _____

Acquifer #2

Depth below Collar Elevation: _____ Formation: _____

Rock Type: _____ Yield(GPM): _____

Date Reported to BLM:^{*} _____ Requirements of BLM:^{*} _____

_____ Water Sample Provided to BLM? _____

United States
Department of
Agriculture

Forest
Service

Manti-LaSal
National Forest

599 West Price River Dr.
Price, Utah 84501

Reply to: 2820

Date: July 13, 1987

11-04-10-0000

Mr. Gene Nodine
Moab District Manager
Bureau of Land Management
P.O. Box 970
Moab, Utah 84532

Dear Mr. Nodine:

Enclosed is a copy of the Environmental Assessment (EA) and Finding of No Significant Impact/Decision Notice (FONSI/DN) for the Arch of Utah, Inc., Trail Mountain Coal Drilling Project (Federal Coal Lease U-49332) prepared by the Manti-LaSal National Forest.

Forest Service consent for approval of the drilling plan is subject to stipulations 1-38 starting on page 3 of the EA. The Manti-LaSal National Forest will issue permits authorizing use of Forest Development Roads and other off-lease access.

If you have any questions, please let us know.

Sincerely,

/s/ William H. Boley

for
A. J. FRANDSEN
Acting Forest Supervisor

Enclosure

cc: ~~San Rafael~~
San Rafael Resource Area Manager
900 North 7th East
Price, Utah 84501

USD-BLM
PRICE RAH
RECEIVED

JUL 17 '87

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DECISION NOTICE
AND
FINDING OF NO SIGNIFICANT IMPACT

ARCH OF UTAH, INC.
TRAIL MOUNTAIN MINE
1987 COAL DRILLING PROJECT

An Environmental Assessment, that discusses alternatives related to a proposal on the Manti-LaSal National Forest by Arch of Utah, Inc. Trail Mountain Mine to drill three coal exploration wells has been prepared. This analysis is consistent with the Manti-LaSal National Forest Land and Resource Management Plan.

Leasing and development activities are conducted under the authority of the following authorizing actions: The Mineral Leasing Act of February 25, 1920 as amended; the Federal Land Policy Management Act (FLPMA) of 1976; the Surface Mining Control and Reclamation Act (SMCRA) of 1977; the Multiple Minerals Development Act of August 13, 1954; the National Environmental Operations Act of August 4, 1977; the National Environmental Policy Act (NEPA) of 1969; the Federal Coal Leasing Amendments Act of 1976, as amended; the Act of October 30, 1978 that further amended the Mineral Leasing Act of 1920; 43 CFR 3400, 43 CFR 2800, 30 CFR 700; and the Manti-LaSal National Forest Land and Resource Management Plan, November 5, 1986.

The proposed drilling is located on Trail Mountain on the Ferron Ranger District. This proposal is to provide the proponent geologic information and coal quality data to maximize recovery of the coal resource found on Federal coal lease U-49332. In accordance with the National Environmental Policy Act a scoping process has been completed and an Interdisciplinary Team has reviewed the proposal and made an analysis which is summarized in the Assessment. Page 2, of the Assessment, discusses the Issues, Concerns and Opportunities that were considered in making this decision. Copies of the Assessment can be found at the Forest Supervisor's Office in Price, Utah, and at the Ferron Ranger District Office in Ferron, Utah.

Alternatives considered, as discussed on pages 2-6 of the Assessment, are: (1) Do Not Consent to the Drilling Program (No Action) and (2) Proposed Action with Forest Service Mitigation.

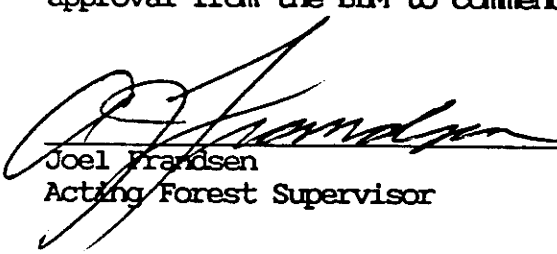
Based on the analysis, authorizing actions, and evaluation described in the Environmental Assessment, it is my decision to select Alternative 2. This alternative would allow the drilling of three coal exploration wells with Forest Service mitigation. The selected alternative permits the construction of access roads, drill locations, and drilling the wells. This is consistent with the Multiple Use Sustained Yield Act.

Page 9 of the Assessment describes the public involvement. Notification of the proposal was published in the local newspaper, personal contacts made, and a letter was sent to Forest planning contacts. Few comments were received concerning this proposal and no new issues or concerns were identified.

Through the Environmental Assessment, it was determined that this is not a major Federal action that would significantly affect the quality of the human environment; therefore, an Environmental Impact Statement is not needed. This determination was made based on the following: (a) there were no irreversible or irretrievable commitment of resources; (b) there are no apparent adverse cumulative or secondary effects; (c) no known threatened or endangered species will be impacted; (d) floodplains will not be negatively affected; (e) there are no alluvial valley floors, prime or unique rangeland, timberland, farmland, known cultural or paleontological values, or wilderness that will be disturbed by this project; and (f) all identified issues and concerns have been evaluated.

This decision is subject to appeal under Secretary of Agriculture Regulation 36 CFR 211.18. A written notice of appeal must be filed with this office within 45 days from the date of decision.

Operations may begin when the operator has received a Forest Service road use permit and special use permit for access to the project area and have received approval from the BLM to commence drilling activities.


Joel Frandsen
Acting Forest Supervisor

Date

7/13/87

ENVIRONMENTAL ASSESSMENT

FOR

ARCH OF UTAH, INC.
TRAIL MOUNTAIN MINE
1987 COAL DRILLING PROJECT

USDA FOREST SERVICE, MANTI-LASAL NATIONAL FOREST

Responsible Official:

A. J. Frandsen
Acting Forest Supervisor
599 W. Price River Drive
Price, Utah 84501
801-637-2817

For Further Information Contact:

John Niebergall
District Ranger
Ferron Ranger District
P.O. Box 310
Ferron, Utah 84523
801-384-2372

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I. INTRODUCTION

A. Purpose and Need

On May 8, 1987 the Manti-LaSal National Forest received from the BLM Moab District Office an operating plan submitted by Arch of Utah, Inc., Trail Mountain Mine. They have proposed the drilling of three coal exploration wells on Federal coal lease U-49332 located on Trail Mountain (see map 1). The purpose of the project is to acquire geologic information and coal quality data to determine future mining plans. All of the proposed drill locations are within Section 26, T. 17 S., R. 6 E.

Rotary drilling and coring will be done by a rubber tired truck mounted drilling rig. Exact drill sites locations are identified on Map 2. Support equipment will consist of a water truck and 4X4 pick-up trucks. When drilling and coring have been completed a truck mounted logging unit will be used.

Site preparation will consist of constructing temporary access roads and drill locations. Topsoil will be stripped and stockpiled from drill sites and temporary roads prior to construction to aid in post drilling reclamation. At each location a mud pit will be constructed to facilitate drilling activities. Air and biodegradable foam are the anticipated drilling mediums to be used for this project. Drilling will average 2,200 feet deep.

Mud pits will be fenced at the conclusion of drilling activities to prevent accidental entry by livestock and wildlife. All drilling, coring, logging and reclamation activities will be completed prior to the onset of winter.

Reclamation will consist of allowing the mud pits to dry, and then backfilling them. The drill sites will be returned to approximate original contour, scarified, and topsoil redistributed. Seeding will be with a seedmix specified by the Forest Service.

All temporary access roads will be closed to vehicular traffic and natural drainage patterns will be restored. Where appropriate, the access roads will be recontoured to the approximate original contour, water barred, scarified and seeded.

B. Authorizing Actions

Leasing and development are under the authority of the following authorizing actions: The Mineral Leasing Act of February 25, 1920 as amended; the Federal Land Policy Management Act (FLPMA) of 1976; the Surface Mining Control and Reclamation Act (SMCRA) of 1977; the Multiple Minerals Development Act of August 13, 1954; the National Environmental Operations Act of August 4, 1977; the National Environmental Policy Act (NEPA) of 1969; the Federal Coal Leasing Amendments Act of 1976, as amended; the Act of October 30, 1978 that further amended the Mineral Leasing Act of 1920; 43 CFR 3400, 43 CFR 2800, 30 CFR 700; and the

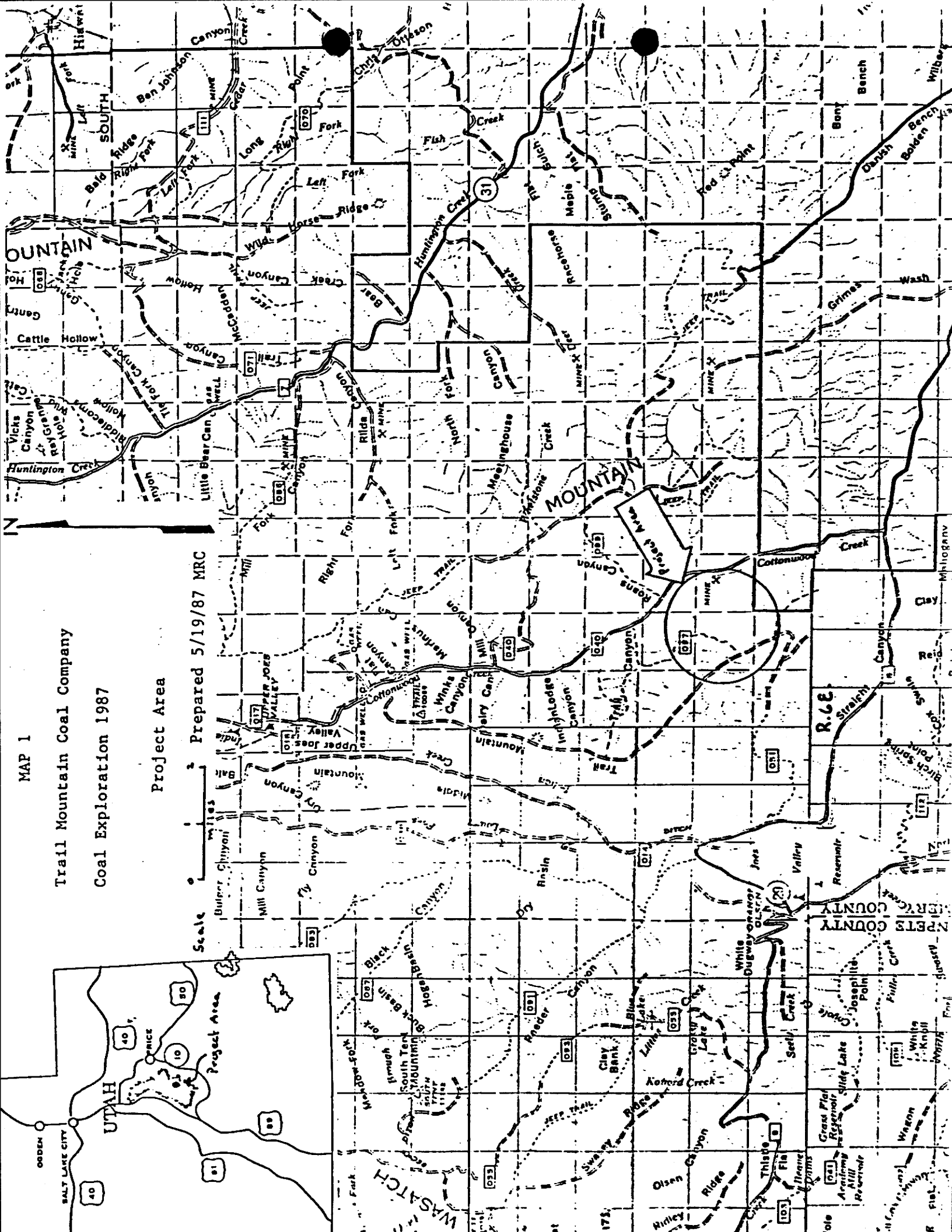
MAP 1

Trail Mountain Coal Company
Coal Exploration 1987

Project Area

Prepared 5/19/87 MRC

Scale 0 1 2 miles



Manti-LaSal National Forest Land and Resource Management Plan, November 5, 1986.

C. Issues and Concerns

On May 14, 1987 an Interdisciplinary (ID) Team from the Ferron District met and conducted a field review for the proposed drill sites. During the ID Team meeting the following issues and concerns were discussed:

1. There is potential for damaging the transportation system.
2. There is potential for conflict with other users of the transportation system; this includes Meridian Oil Co., Utah Power and Light Co., other Forest users, and the Forest Service.
3. During the cultural resource survey the first known campsite to exist on Trail Mountain was discovered and is relatively close to drill site TM-DH-1. There is a potential that construction of drill site TM-DH-1 may disturb cultural resource values.

D. Opportunities

This proposal helps the operator to effectively develop the coal resource by providing for maximum recovery of the coal and at the same time providing for safety and efficiency.

E. Negative Declaration

The ID Team determined that this action after mitigation, would not cause impacts to the following: prime or unique rangeland, timberland or farmland; floodplains; cultural (see Appendix A) or paleontology resources; wetlands; alluvial valley floors; known threatened, endangered or sensitive plant or animal species.

The ID Team determined that this proposal would not affect riparian areas. Thus, a RPN Management Unit was not defined.

II. Alternatives

A. Alternative 1 - Do Not Consent to the Drilling Program (No Action)

The Council of Environmental Quality guidelines requires the consideration of the "No Action" Alternative. This alternative would deny the drilling of the three proposed wells in the proposed locations. The operator would have to propose alternate coal exploration plans to meet their needs for the development of the lease.

B. Alternative 2 - Proposed Action with Forest Service Mitigation

Approve the proposed action with Forest Service mitigation. This alternative would permit the construction of access roads, drill locations and drilling of three exploration wells with the following management requirements, constraints and mitigations:

1. A pre-work meeting including the responsible company representative(s), contractors, and the Forest Service must be conducted at the project location prior to commencement of operations. Site-specific Forest Service requirements will be discussed at this time.
2. A road-use permit must be obtained from the Forest Service before equipment is transported onto National Forest System lands.
3. A Special use permit must be obtained for that portion of the project access road from FDR 50034 to the lease boundary.
4. All surface disturbing activities including reclamation must be supervised by a responsible representative of the permittee who is aware of the terms and conditions of the project permits. A copy of the appropriate permits must be available for review at the project site.
5. The Forest must be notified 48 hours in advance that heavy equipment will be moved onto National Forest System lands and that surface disturbing activities will commence.
6. Establishment of campsites and staging areas on National Forest System lands in support of this project is subject to Forest Service approval.
7. The Forest Service must be notified of any proposed alterations to the plan of operations. Any changes to the existing plan are subject to Forest Service review and concurrence.
8. Fire suppression equipment must be available to all personnel working at the project site. Equipment must include at least one hand tool per crew member consisting of shovels and pulaskis and one properly rated fire extinguisher per vehicle and/or internal combustion engine.
9. All gasoline, diesel, and steam-powered equipment must be equipped with effective spark arresters and mufflers. Spark arresters must meet Forest Service specifications discussed in the USDA Forest Service Spark Arrester Guide, June, 1981. In addition, all electrical equipment must be properly insulated to prevent sparks.
10. The permittee will be held responsible for damage and suppression cost for fires started as a result of operations. Fires must be reported to the Forest Service as soon as possible.
11. The Forest Service reserves the right to suspend operations during periods of high fire potential.

12. Water needed in support of operations must be properly and legally obtained according to state water laws. The location of diversion, if on National Forest System lands, is subject to Forest Service review and approval.
13. Unauthorized off-road vehicular travel is prohibited.
14. Section corners or other survey markers, including claim corners, in the project area must be located and flagged for preservation prior to commencement of surface disturbing activities. The removal, displacement, or disturbance of markers must be approved by the proper authority.
15. If cultural or paleontological resources are discovered during operations, all operations which may result in disturbance to the resources must cease and the Forest Service must be notified of the discovery.
16. Gates must be closed after entry unless otherwise notified.
17. The permittee will be held responsible for all damages to fences, cattleguards, resource improvements, roads, and other structures on National Forest System lands which result from operations. The Forest Service must be notified of damages as soon as possible.
18. All trees and brush must be cleared as the first step for new access and site construction. Topsoil must be stripped and stockpiled at a location where loss and contamination is minimized.
19. Disturbed areas must be reclaimed by the end of the field season. Exceptions require Forest Service approval.
20. Contaminated soil and gravel must be stripped and placed in the mud pit prior to site reclamation.
21. Mud pits must be allowed to dry before they are backfilled and reclaimed. They must be enclosed by a 4-strand barbed wire fence while they are left to dry.
22. When dry, mud pits must be reclaimed by selectively backfilling excavated materials, topsoil last, such that the disturbed area is replaced to approximate original contour. The disturbed area must be seeded with the following seed mix after the topsoil is replaced:

Species	pounds/acre
Intermediate Wheatgrass - <i>Agropyron intermedium</i>	3
Slender Wheatgrass - <i>Agropyron trachycaulum</i>	3
Pubescent Wheatgrass - <i>Agropyron trichophorum</i>	3
Smooth Brome - <i>Bromus inermis</i>	3
Yellow Sweet Clover - <i>Melilotus officinalis</i>	1
Ladak Alfalfa - <i>Medicago sativa ladak</i>	1
Small Burnett - <i>Sanguisorba minor</i>	1

This seed mixture must be 99 percent pure live seed and applied at the rate of 15 pounds per acre.

23. The operator will control noxious weed invasion of disturbed sites associated with this project.
24. Roads to be obliterated must be reclaimed by ripping the surface, replacing the disturbed area to the approximate original contour, replacing stockpiled topsoil, and seeding with the specified seed mix. Seeding must take place when topsoil is replaced. Water diversions structures, if needed, must be constructed as specified by the Forest Service.
25. All disturbed drainages must be replaced to their approximate original configuration when the project area is reclaimed.
26. All significant water encountered during drilling must be reported to the Forest Service, including the depth and formation at which it was encountered, and an estimate of flow.
27. The operator must clean up and remove all drilling equipment, trash, garbage, flagging, vehicles, and other such materials from National Forest System lands.
28. All trash, garbage, and other refuse must be properly contained on the project site prior to disposal off the Forest.
29. All drill holes must be plugged in accordance with Federal and State regulations.
30. Operations must be coordinated with grazing permittees to prevent conflicts.
31. Harrassment of wildlife and livestock is prohibited.
32. All drilling fluids, muds, cuttings and water produced must be contained on site in mud pits or portable containers. Fluids must not be allowed to flow out over the ground or into drainages. The pits must not be used for disposal of garbage, trash, or other refuse.
33. Any trees to be removed larger than 8 inch diameter must be cut and not pushed over. The timber must be skidded or hauled before road construction begins to a point designated by the Forest Service. Trees longer than 33 feet must be cut into smaller sections before skidding. All timber must be cut into 8 foot lengths and stacked at the designated point.
34. Outside berms will not be constructed on any roads.
35. A culvert installation will be required at the ephemeral drainage crossing for TM-DH-1. This culvert will be removed during reclamation of drill site TM-DH-1.

36. The newly constructed temporary roads will be closed at the conclusion of drilling related activities in the following manner:

TM-DH-1 - Recontoured to approximate original contour. Topsoil will be distributed and the disturbed areas seeded. After seeding the vegetation removed during construction will be scattered across the disturbed area.

TM-DH-2 - Waterbarred, scarified and seeded. Topsoil piles and disturbed sites will be seeded and small trees and brush removed during construction will be scattered across the disturbed area.

TM-DH-3 - Recontoured to approximate original contour. Topsoil will be distributed and the disturbed areas seeded. After seeding the vegetation removed during construction will be scattered across the disturbed area.

37. When TM-DH-1 is constructed a qualified archeologist must be present.
38. Stipulations for Lands of the National Forest System Under Jurisdiction of the Department of Agriculture.

The licensee/permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights and regulations must be complied with for (1) all use and occupancy of the NFS prior to approval of a permit/operation plan by the Secretary of the Interior, (2) uses of all existing improvements, such as Forest Development Roads, within and outside the area licensed, permitted or leased by the Secretary of the Interior, and (3) use and occupancy of the NFS not authorized by a permit/operating plan approved by the Secretary of the Interior.

All matters related to this stipulation are to be addressed

to Forest Supervisor

at Manti-LaSal National Forest
599 West Price River Drive
Price, Utah 84501

Telephone No. 801-637-2817

who is the authorized representative of the Secretary of Agriculture.

Stipulations to be Included in the Road Use Permit

39. Roads must not be used when they are wet and susceptible to damage.
40. The permittee is responsible for repair of any damages to roads which are caused by his operations.
41. All traffic must maintain safe speeds commensurate with existing conditions.

42. Roads must be watered if dust becomes a problem or if excessive loss of road material occurs.
43. Heavy equipment may not be moved on Forest Development Roads on the following dates: July 3-5, September 5-7 and 30, and October 1-5, 10-12, and 16-19, 1987. If the project continues into 1988 restricted dates will be determined at that time.

III. Description of Affected Environment - Affected Environment

A. Transportation System

To access this project the operator will use Forest Development Road (FDR) 50040, Cottonwood Canyon Road and FDR 50034, Trail Mountain Road to Section 26, T. 17 S., R. 6 E.

Cottonwood Canyon Road is a gravel surface road from the Trail Mountain Mine to Indian Creek Well #1 in Section 2, T. 17 S., R. 7 E. The road surface from Indian Creek Well #1 to the existing project access road on Trail Mountain is native material.

Meridian Oil Company the unit operator of the Indian Creek Unit has proposed drilling a new gas well approximately 4000 feet north of Indian Creek Well #1. If this location is developed then Cottonwood Canyon Road would be reconstructed from Indian Creek Well #1 to the Marinus Canyon.

Cottonwood Canyon Road will be used by Meridian Oil Co., Utah Power and Light Co., other Forest users, and the Forest Service during the 1987 field season.

An existing non-system road will be used to access the project area. The grade for this access ranges from 1 to 12 percent. Where this access first enters the aspen the alignment of the road is poor and will require realignment. This will consist of approximately 25 feet of road.

Temporary access roads will be constructed from the existing non-system access road to complete the transportation needs of the project. The temporary access road to TM-DH-1 will be constructed across a sagebrush - grass community and one ephemeral drainage. No seeps or wet areas will be crossed. The access road grade will range from 1 to 5 percent and will be 900 feet long.

The temporary access road to TM-DH-2 will be constructed through a mixed stand of Limber Pine, Douglas Fir, and Aspen and along the perimeter of a sagebrush - grass community. No ephemeral drainages, seeps or wet areas will be crossed. The access road grade will range from 1 to 8 percent and will be 2100 feet long.

The temporary access road to TM-DH-3 will be constructed as a spur TM-DH-2 access road. The road will cross a sagebrush - grass community with no

ephemeral drainages, seeps or wet areas. The access road grade will range from 1 to 5 percent and will be 1000 feet long.

All temporary access roads will be constructed on Federal coal lease U-49332 and within an existing Mining and Reclamation Permit area.

Under the proposed drilling operations of Trail Mountain Mine and Utah Power and Light Co. for coal exploration and development and Meridian Oil, Inc. for oil and gas development the traffic on the Cottonwood Road between Trail Mountain Mine and the Trail Mountain Road, is expected to remain near the five year average of 1981-1986. Traffic conflicts will be resolved by restricting concentrated movement of truck traffic by the commercial (mineral) users during the opening weekends of the big game season.

Traffic is expected to be approximately 60 vehicle trips per day seasonally adjusted. Truck traffic is expected to make up 25 percent of the use. Dispersed recreation is expected to be concentrated in late september or early October when coal drilling traffic has ceased or is curtailed. Truck use outside of the dry season would require reinforcement of the running surface to prevent damage to the roadbed and allow for adequate traffic movement.

B. Cultural Resources

During the field review of the proposed well locations Archeological Environmental Resource Corporation conducted a cultural resource survey of the proposed well locations. At TM-DH-1 a significant prehistoric campsite was identified and analyzed by F. R. Hauck, Ph.D. This campsite was previously unknown and the drill site was moved to protect the newly discovered resource. This was the only significant site discovered or known to occur within the project area. For further details pertaining to the cultural resource survey see Appendix A.

IV. Environmental Consequences - Environmental Impacts

A. Alternative 1 - Do Not Consent to the Drilling Program (No Action)

Short term residual impacts

Selection of Alternative 1 would mean that the proponent would not be allowed to drill. There would be no impacts to the transportation system or other resources and naturally occurring trends will continue until affected by other influences.

Short term and long term productivity

Selection of Alternative 1 would deny the proponent the opportunity to develop Federal coal lease U-49332 with the geologic information and quality data needed to provided for maximum recovery of the coal contained within this lease.

Irreversible and irretrievable commitments

Selection of Alternative 1 would mean that the proponent would develop the coal resource from underground drilling. This method of drilling is very limited and does not reflect minor changes in the coal seam which would affect maximum recovery of the coal resource. Once the operator has implemented a mine design it is very expensive to change and sometime it is impossible to change. Mining without geologic information and quality data does not provide for maximum recovery of coal. Potentially, then, some coal which could be recovered will not be recovered.

B. Alternative 2 - Proposed Action with Forest Service Mitigation

Short term residual impacts

Selection of Alternative 2 would create some short term impacts to Forest resources. Some vegetation will be removed from the temporary access roads and drill sites. This loss of vegetation will continue until the disturbed areas are reclaimed and vegetation has established itself. There are no known residual impacts.

Short term and long term productivity

The construction of the temporary access roads and drill sites will disturb a maximum of 3 acres. This will remove less than 1 AUM (Animal Unit Month) of forage production until the site is reclaimed. With proper reclamation disturbed sites will equal or exceed predisturbance production.

Irreversible and irretrievable commitments

Approval of this alternative will not create any unanticipated irreversible or irretrievable commitments of Forest resources. The removal of the coal is an irretrievable resource once mined and used. The removal of vegetation will be relatively minor. Reclamation should restore the area to a state similar to it's original condition.

V. CUMULATIVE EFFECTS

There are two primary activities occurring within the area impacted by this proposal. They are coal mining and related activities, including this proposal, and livestock grazing. The area is also provides wildlife habitat.

There will be no adverse affects on coal mining as this is a related project. As indicated in the "Short term and long term" section of alternative 2 less than one AUM will be lost during each grazing season. This will not have an adverse affect on livestock grazing or the management of the allotment. There is also sufficient habitat and forage available so that displaced wildlife will not be affected by this proposal.

As coal exploration proceeds on Trail Mountain there will be additional surface disturbing activities. These activities should be similar in nature to this proposal. It is anticipated that well spacing for future coal exploration on Trail Mountain will range from 2000 to 3000 feet. When exploration and reclamation is completed disturbed areas will be returned to production. Wildlife will start using the affected areas relatively soon after activities have ceased and forage production will improve over few years until new vegetation has been completely established.

VI. Personal and Public Involvement

A. Interdisciplinary Team

The ID Team consisted of the following Forest Service personnel:

Mark R. Chatterton	Geologist	Team Leader
John Niebergall	District Ranger	
Billy J. Dye	Forester	

The following were Forest Service consultants to the ID Team.

John H. Healy	Range Conservationist
Robert Thompson	T & E Plant Specialist
Les Wikle	Archeologist
Brent Barney	Engineer

B. Public Contacts

The following agencies, groups, and individuals have been contacted in connection with this project:

Personal Contacts

Jack Curtis, President of the Trail Mountain Allotment of the Cottonwood Livestock Association was contacted about this proposal. Mr. Curtis had no concerns with the proposal.

Newspaper Notification

A notice was published in the Emery County Progress on May 12, 1987 requesting comments from any interested party. No comments, positive or negative were received. A copy of the newspaper article is found in Appendix B.

Forest Planning Contacts

A list of individuals, groups, and organizations that wanted to be kept informed of activities occurring on the Ferron Ranger District were identified during the Forest planning process. A letter briefly describing the drilling proposal and the anticipated effects was sent requesting their comments. A copy of this list and the letter can be found in Appendix C.

C. Intensity of Public Interest

Few comments were received concerning this proposal and no new issues or concerns were identified. Letters received pertaining to this proposal from the Forest Planning Contacts can be seen in Appendix D.

VII. Appendix

- Appendix A Cultural Resource Survey
- Appendix B Newspaper Article
- Appendix C Forest Planning Contacts
- Appendix D Letters Received From Publics